



# The State of Connected Operations 2022

See how digitization drives business resilience, why the new industrial workforce is demanding intelligent tools, and how investments in sustainability are paying off.

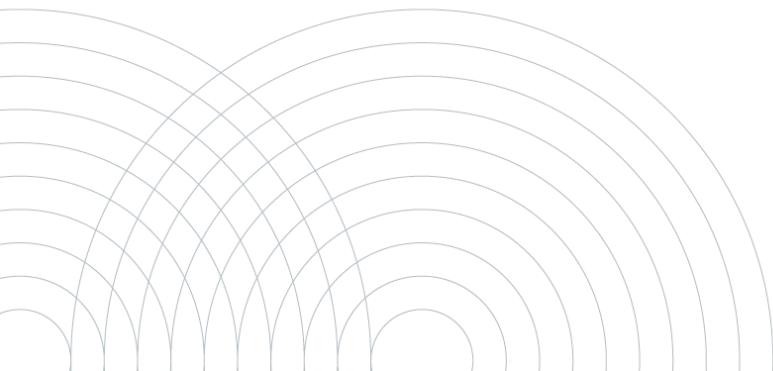


## A tipping point in the digital transformation of physical operations

Organizations that conduct physical operations are the backbone of our global economy, representing more than 40% of global gross domestic product (GDP). They work behind the scenes to ensure the flow of goods and services, operating warehouses the size of football fields and fleets of thousands of vehicles, trailers, and equipment. Yet despite their immense importance and impact, the people that keep our physical operations running—drivers, field technicians, safety managers, warehouse supervisors, and beyond—have historically been underserved by technology. Now, that is changing.

Over the past decade, Internet of Things (IoT) technology has reached a critical inflection point. Cameras and sensors have become more portable and affordable. High-bandwidth cellular networks have made it possible to stream incredible volumes of data in real time. Efficiencies in cloud computing and storage have paved the way for artificial intelligence (AI) and automation. As these technologies have become more accessible, affordable, and advanced, their applications to physical operations have multiplied; just a few examples include telematics, AI cameras, workflow apps, and asset tracking.

Many organizations have already adopted these technologies, and the exceptional circumstances of the past few years have further accelerated the digital transformation that was already underway. Global supply chain disruptions, labor shortages, and rising costs have put additional pressure on physical operations, reinforcing the need for real-time data to adapt to ever-changing dynamics. In these times, early adopters of digital technologies are proving to be more agile and resilient.





# 1,500+

operations leaders surveyed  
across 8 countries

*See complete survey methodology on page 36.*

Today, we are at a tipping point. The new industrial workforce is demanding easy-to-use tools and systems that are in line with the modern technologies they use every day. And as advances in technology make it possible to capture more data from more assets and connect it to the cloud, we are seeing physical operations digitize and transform into connected operations: organizations with end-to-end visibility across their operations that are more efficient, sustainable, and safe.

## What You'll Discover in this Report

The 2022 State of Connected Operations Report outlines findings from a survey of 1,525 operations leaders across eight countries: Belgium, France, Germany, Luxembourg, Mexico, Netherlands, United Kingdom, and the United States. In this report, we examine why organizations are connecting their operations and the factors driving this change. Our findings reveal that organizations at the leading edge of digital transformation are better equipped to succeed in 2022 and beyond.

“When it comes to digital transformation, it is no longer a question of if, but when. Data is unlocking new levels of business resilience, safety, and sustainability.”



**SANJIT BISWAS**  
*CEO & Co-Founder of Samsara*

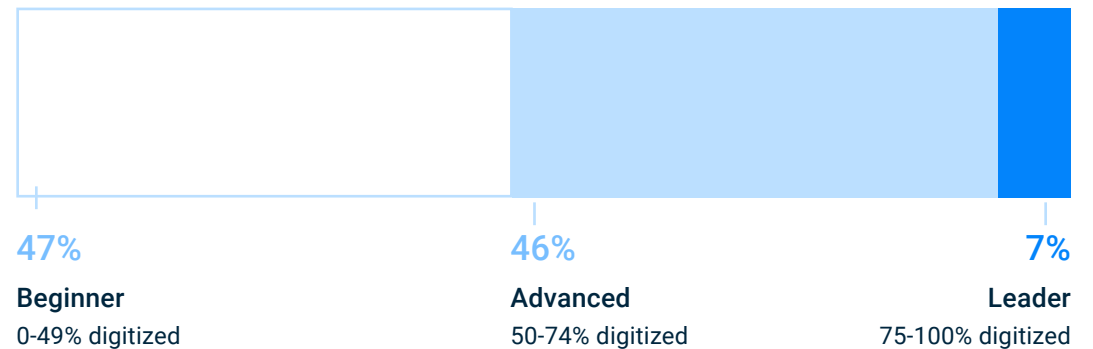


Connected Operations Leaders are nearly **2x more likely to exceed revenue goals** compared to those in the beginning stages of digitization.

## Connected Operations Leaders are at the forefront of digital transformation

7% of respondents are Connected Operations Leaders: organizations that report the highest level of digital maturity across their operations. Compared to organizations in the beginning stages of digitization, Connected Operations Leaders were 10x more likely to rate their operational resilience as very high, 3.6x more likely to report much higher revenue growth than competitors, and nearly 2x more likely to exceed revenue goals. Look for this highlighted text throughout the report to see what **Connected Operations Leaders are doing differently**.

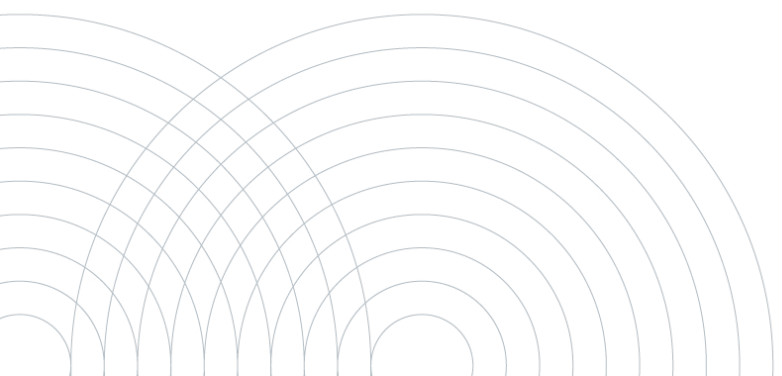
How would you rate the digital maturity of your organization's physical operations?





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# Executive summary

01

## Connected operations are more resilient and profitable

Unprecedented supply chain disruptions and rising costs have made operational agility more critical than ever. Digitization is enabling organizations to assess and respond based on real-time data.

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**95%** of respondents agreed that digitizing their operations improves their ability to weather disruptions.

02

## The new industrial workforce demands intelligent tools

The labor shortage has mandated a renewed focus on the employee experience. Today, employees expect modern tools that improve safety, automate daily tasks, and are as easy to use as the technology they rely on in their personal lives.

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**90%** of respondents have implemented AI and automation technologies or plan to by 2023. Of those that have already implemented AI and automation, **95%** said these technologies increased employee retention.

03

## Environmental sustainability is critical to business success

Skyrocketing fuel prices, shifting customer and investor expectations, and the growing availability of commercial electric vehicles (EVs) are driving an increased focus on—and investment in—sustainability.

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**99%** of respondents have already implemented or plan to implement a sustainability program. Nearly half (**49%**) have accelerated their transition to EVs in response to rising fuel costs.

# 01

## Connected operations are more resilient and profitable

Unprecedented supply chain disruptions and rising costs have made operational agility more important than ever. Digitization—the application of digital technologies to connect data and processes across operations—is enabling organizations to assess and respond based on real-time insights.

### KEY STATS

95%

95% of respondents agree that digitizing their operations improves their ability to weather disruptions.

60%

In response to rising fuel costs, 60% of organizations have increased their monitoring of powered assets.

10x

Connected Operations Leaders were 10x more likely to rate their operational resilience very high.

2x

Connected Operations Leaders were nearly 2x more likely to exceed revenue goals.

## Supply chain delays and fuel prices are top challenges for physical operations

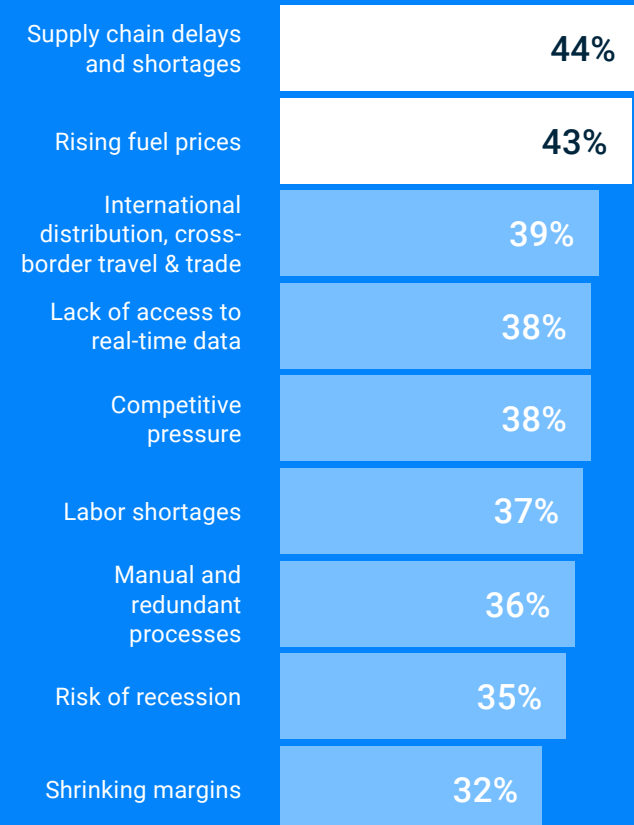
The past few years have been defined by uncertainty and unpredictability. Global disruptions in supply, demand, and trade have impacted nearly every industry, and physical operations have been particularly hard hit. The top two major challenges respondents cited were supply chain delays and shortages (44%) and rising fuel prices (43%). Furthermore, 38% of respondents cited lack of access to real-time data as a major challenge, hindering their ability to pivot quickly.



**More than 40%** cited supply chain delays, fuel prices as top challenges

Which of the following are major challenges for your organization's physical operations?

Select all that apply.





## Technology is helping combat rising fuel costs

While advancements in technology instigated the tidal shift towards digitization, the last few years of unprecedented global disruptions have accelerated it. Rising fuel costs are just one recent example of a rapid-onset crisis with significant financial ramifications—and our findings reveal that organizations are looking to technology as a solution.

The top action organizations are taking in response to rising fuel costs is increasing their monitoring of powered assets (60%), such as heavy equipment, off-highway vehicles, construction equipment, generators, and compressors. These organizations are using real-time data on idling and fuel consumption to proactively identify and target inefficiencies. Similarly, more than half (54%) have invested in technology to optimize routing, further leveraging digital tools to increase operational efficiency.

60% of organizations have **increased their monitoring** of powered assets in response to **rising fuel costs**

Which of the following actions has your organization taken in response to rising fuel costs?

Select all that apply.

Increased our monitoring of powered assets (idle time, fuel efficiency, maintenance, etc.)

60%

Increased our budget for fuel

55%

Invested in technology to optimize routing

54%

Increased costs for our customers

53%

Accelerated our transition to Electric Vehicles (EVs)

49%

## Modern digital technology is key for business survival

Rising fuel prices are just one example of why physical operations require real-time data. In today's global economy, every organization needs to operate efficiently to remain competitive. There is no question; respondents see modern digital technologies as the key to operational agility.

95% of respondents agreed that digitizing their operations improves their ability to weather disruptions. Organizations with a higher level of digital maturity were even more likely to view digitization as key to their success. 99% of **Connected Operations Leaders agreed that consolidated data improves their cross-functional agility.**

On the flipside, it's clear that legacy systems are holding them back and siloed data is compounding problems; 89% of respondents agreed that disjointed technology and data negatively impact their bottom line. It's no surprise that the vast majority of physical operations organizations are looking to modernize their technology stack this year. 84% of respondents said updating legacy technology is a high priority or critical priority for their organization in 2022.

95% agreed that digitization improves ability to **weather disruptions**

How strongly do you agree or disagree with the following statements?

95%  
agree

Digitizing our operations improves our ability to weather disruptions

96%  
agree

Consolidated data improves our cross-functional agility

94%  
agree

Breaking down data silos in physical operations is critical to our organization's survival in the next decade

89%  
agree

Disjointed technology and data negatively impact our bottom line

84% said updating legacy technology is either a **high or critical priority**

## Digital maturity is key to operational resilience: Connected Operations Leaders are 10x more likely to rate their resilience as very high

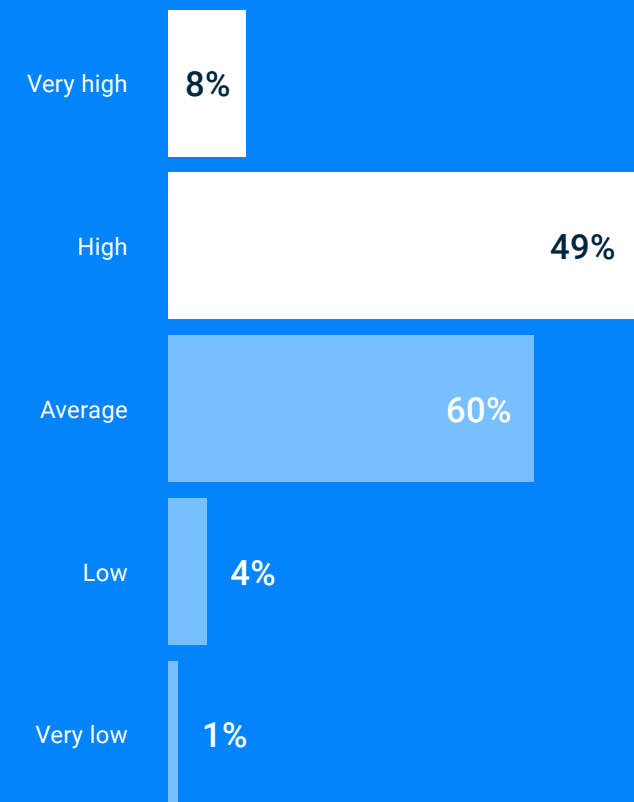
Operational resilience—an organization's ability to adapt its operations to constantly-evolving requirements brought on by market dynamics, competitive pressures, changing customer demands, and macroeconomic turbulence—has become more important than ever.

While the resilience of physical operations organizations has been tested over the past few years, the majority of respondents (57%) report that their resilience is high or very high. But our findings reveal that digital maturity is a huge factor in operational resiliency. Of the respondents that reported very low, low, or average resilience, more than half (66%) are in the beginning stages of digitization.

On the other hand, organizations that are more digitally mature report higher resilience. Compared to organizations in the beginning stages of digitization, **Connected Operations Leaders were 10x more likely to rate their operational resilience as very high.**

57% of all respondents rate their resilience as high or very high

How would you rate your organization's level of operational resilience?



“With real-time operational data, we can make smarter business decisions that directly impact our bottom line. For example, we recently sold \$10 million of underutilized equipment, freeing up cash flow to invest in areas that matter — like new equipment we really need. But most importantly, the technology keeps our people safe behind the wheel.”

**FARRUKH RAFIQ**

*Chief Procurement Officer and VP of Fleet, Artera*



## 9 in 10 organizations report increased profit as a result of digital technology investments

Digitization is creating more agile, resilient operations. But ultimately, the bottom line is what matters—and it's clear that digitization yields significant ROI. Nearly all respondents (91%) agreed that their organization's investments in digital technology have increased net profit.

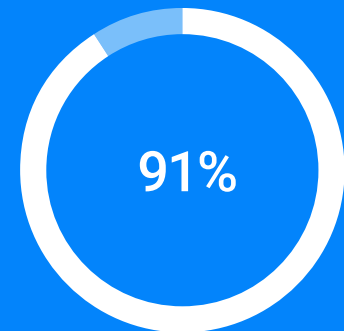
Even those in the beginning stages of digitization report that their initial investments in digital technologies have paid off (86%)—a clear indication that these investments deliver ROI even in the early stages. This effect is even more pronounced for organizations that are more digitally mature. **99% of Connected Operations Leaders have seen increased net profit from their investment in digital technology.**

91% report **increased net profit** from digital technology investments

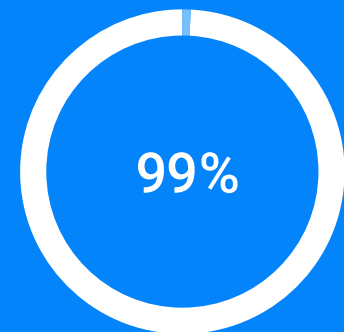
Have your organization's investments in digital technology for physical operations increased net profit (bottom line)?

● Yes ● No

All respondents



Connected Operations Leaders

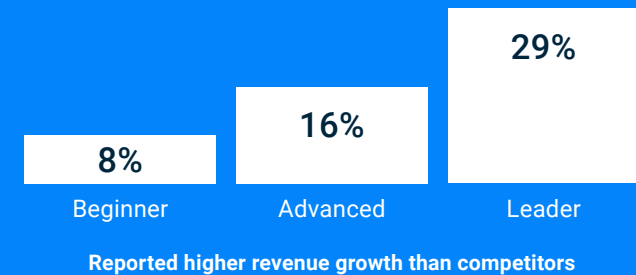




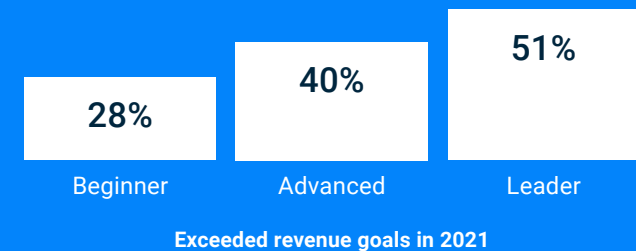
## Digitization is clearly linked to stronger financial performance

Ultimately, organizations that are more digitally mature are outperforming those that are less digitally mature. Compared to organizations in the beginning stages of digitization, **Connected Operations Leaders were 3.6x more likely to report much higher revenue growth than competitors and nearly 2x more likely to exceed revenue goals.**

Connected Operations Leaders are 3.6x more likely to report much **higher revenue growth** than competitors



Connected Operations Leaders are nearly 2x more likely to **exceed revenue goals**



## KEY TAKEAWAY

# For physical operations, thriving in today's market means having the right information at your fingertips

Our findings clearly show that organizations at the forefront of digitization are more resilient and profitable. But why? By surfacing and connecting large volumes of real-time data, digital technologies unlock actionable operational insights.

These insights not only increase efficiency and reduce costs but also help organizations remain agile, resilient, and competitive in the face of ever-evolving market demands. Investments in digital technology can pay for themselves many times over—and continue to appreciate over time.



# 02

## The new industrial workforce demands intelligent tools

The labor shortage has mandated a renewed focus on employee retention, engagement, and safety. Most technology is not replacing physical operations employees, but rather increasing engagement, enabling remote work, and offering greater upskilling opportunities.

### KEY STATS

54%

54% of all respondents cite easy-to-use technology as a key factor in how they recruit and retain employees.

91%

91% of respondents have implemented, in some capacity, emerging technologies that allow employees in physical operations to do some or all of their work remotely.

95%

95% of respondents that have already implemented AI and automation report increased employee retention.



## Increased overtime led to more safety risks and higher employee turnover in last 12 months

Today, organizations with physical operations are experiencing a record-breaking labor shortage at the same time as increased demand. Out of necessity, many organizations have used overtime work as a short-term solution—but this has exacerbated the problem, endangering employees and ultimately leading to burnout. The majority of respondents reported that increased overtime in the past 12 months has resulted in more safety risks (69%) and higher employee turnover (74%).



Increased overtime is a **serious risk** to employee **safety and retention**

In the past 12 months, did increased overtime result in any of the following?

● Yes ● No

Higher employee turnover

74%

More safety risks

69%

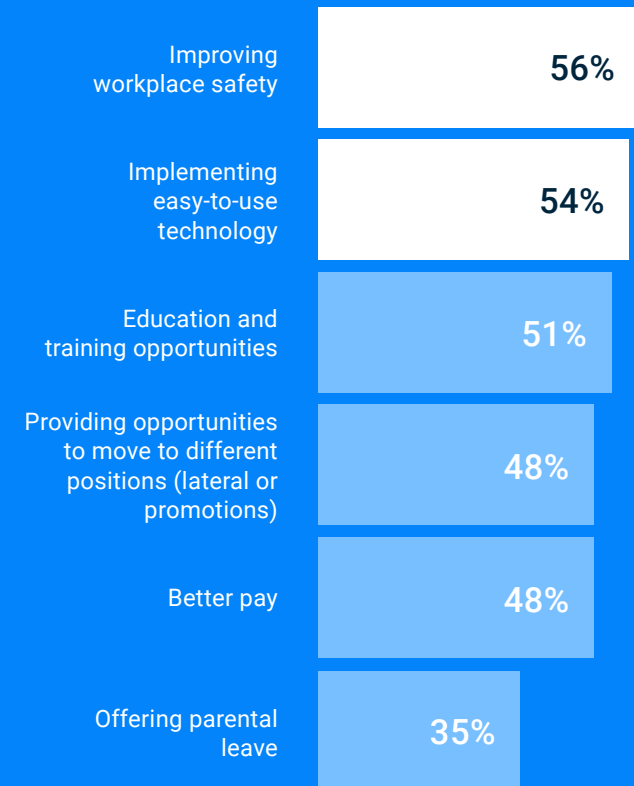
## The two most influential factors in recruiting and retaining employees: improving safety and offering easy-to-use technology

Though technology has modernized the employee experience in nearly every other industry, the people that keep our physical operations running—drivers, field technicians, safety managers, warehouse supervisors, and beyond—have historically been underserved by technology. Today, the new industrial workforce is demanding easy-to-use technology that helps them do their jobs better and keeps them safe. The labor shortage has brought this further into focus by underscoring the need to recruit and retain employees.

Respondents reported that the top two most influential factors in recruiting and retaining employees are improving workplace safety (56%) and implementing easy-to-use technology (54%). More than half (58%) of **Connected Operations Leaders cite easy-to-use technology as a key factor in how they recruit and retain employees, reflecting how their investments in technology are giving them a competitive edge in the labor market.**

### Technology is key to employee recruiting and retention

Which of the following are MOST influential in recruiting and retaining employees at your organization? Select all that apply.





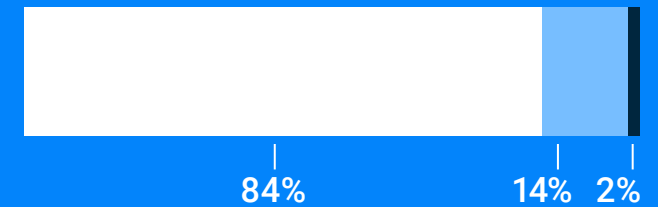
Respondents also cited investing in training programs to upskill workers (84%) and implementing flexible work options (81%) as high or critical priorities for 2022, revealing how the new industrial workforce is demanding modern systems and tools that stack up to the technologies they are accustomed to in their personal lives. Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were even more likely (+15%) to cite implementing flexible work options as a high or critical priority.**

More than 80% said implementing training programs & flexible work options are top priorities

How high of a priority is it to address the following at your organization in 2022?

Priority level ● High / critical ● Medium ● Low

Investing in training programs to upskill existing workers



Implementing flexible work options for employees



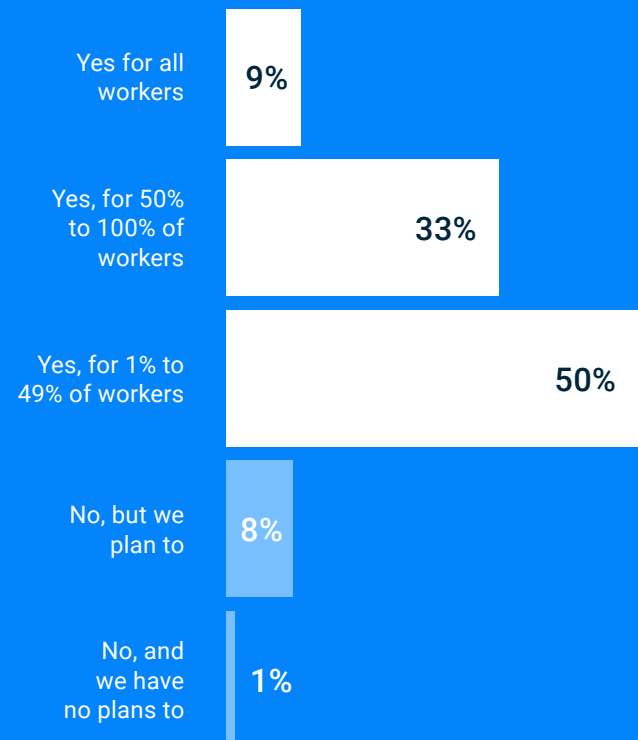
## Technology that enables remote work helps organizations stand out in a competitive labor market

A number of emerging technologies now allow employees in physical operations to do some or all of their work remotely, minimizing time spent onsite. Just a few examples include using real-time diagnostics to complete asset inspections remotely, using video for real-time coaching and site walk-throughs (instead of riding along or going on-site), and using AI for automatic processing of data. The impact of these technologies on employees' day-to-day experiences can be huge; it could mean avoiding a 12-hour round trip to a remote site, for example, or not having to manually sift through a stack of paper documents.

Almost all respondents (91%) currently offer technology that enables at least some of their employees to perform work remotely, and 42% offer these technologies to half or more of their workforce. Only 1% of respondents said they have no plans to implement these technologies, illustrating how critical the ability to perform work remotely has become today. Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were 6.5x more likely to offer these technologies to all of their employees.**

91% offer technology that enables employees to perform work remotely

Does your organization offer physical operations employees technology to perform work remotely?



The top two benefits respondents expect to achieve as a result of implementing these technologies are: improved competitiveness with organizations in similar industries (53%) and the ability to navigate future disruptions (52%), such as extreme weather or pandemics.

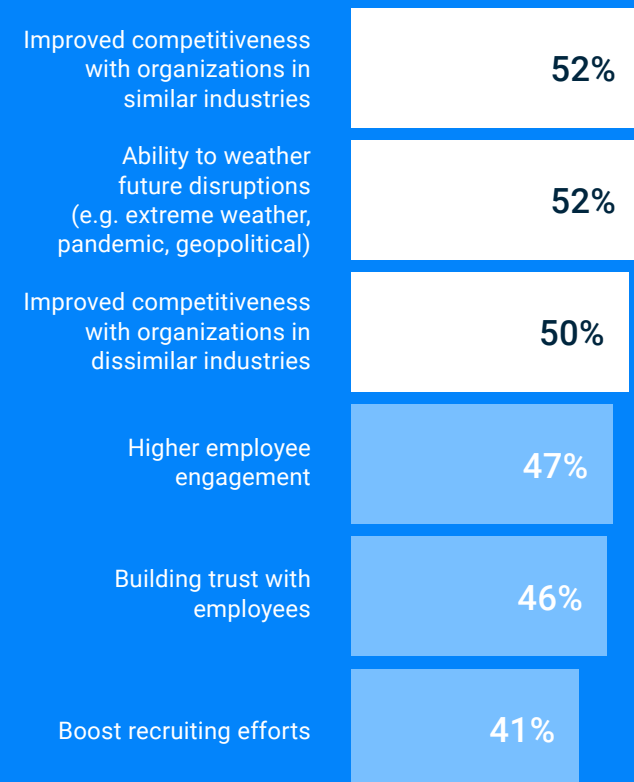
Interestingly, half (50%) of respondents also cited improved competitiveness with organizations in dissimilar industries as a benefit. This shows how physical operations organizations are increasingly competing with other industries for labor—and technology is helping them stand out. Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were more likely (+22%) to cite increased competitiveness with dissimilar industries as a benefit of offering technology that enables remote work.**

Furthermore, while competitiveness and resilience are clearly top of mind, nearly half (47%) of respondents also cited higher employee engagement as another key benefit. In 2022, it's clear that technology is key to engaging and retaining employees.

## Top benefits of technology that enables remote work: improved competitiveness and resilience

Which of the following benefits has your organization experienced from providing employees with technology to perform work remotely?

Select all that apply.



“AI dash cams have helped us not only improve workplace safety, but further enhance a world-class culture where employees want to work. As a result, safety has become even more of a competitive advantage for us, and we improved driver retention by 15%.”

**DAVID SERACH**

*Director of Safety, Chalk Mountain*



## AI and automation, which increase employee retention, will be nearly universal by 2023

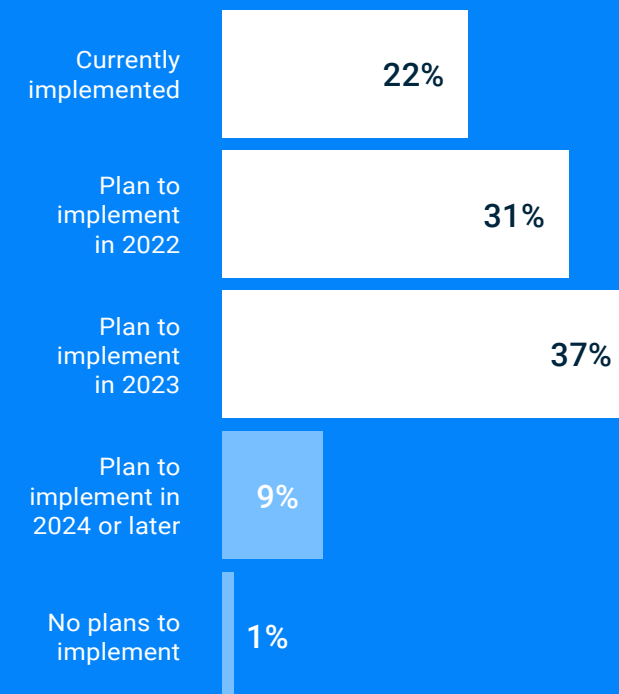
Applications of artificial intelligence (AI) and automation within physical operations have exploded over the past few years—from AI cameras to automated workflows and alerts. Today, we are on the cusp of a wave of adoption as these technologies become table stakes in connecting physical operations.

The vast majority of respondents (90%) have already implemented AI and automation technologies or plan to by 2023. Even those that are lagging behind have plans to implement this technology soon; 73% of respondents in the beginning stages of digitization say they plan to implement AI and automation technology in 2022 or 2023. Only 1% of all respondents say they have no plans to implement these emerging technologies.

What's fueling this wave of adoption? Respondents most commonly reported greater upskilling opportunities (43%) and improved safety (42%) as benefits of AI and automation technologies, along with greater business agility (41%) and higher employee satisfaction (41%). Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were more likely (+31%) to report higher employee satisfaction as a benefit, illustrating how their investments in technology are paying off.**

90% have already implemented AI and automation technologies or plan to by 2023

What are your organization's plans for implementing emerging technologies such as AI and automation?

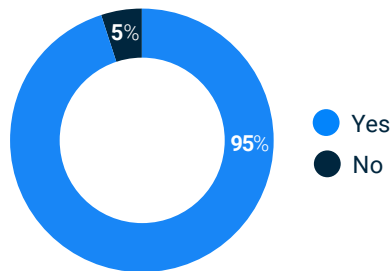




Decades before these technologies were available, people began to worry that AI and automation would eventually replace operations employees. But now that AI and automation are becoming more commonplace, our findings reveal the opposite is true. The vast majority (90%) of respondents said they expect AI and automation to increase employee retention, as employees benefit from greater upskilling opportunities, increased safety, more autonomy, and less time spent on repetitive tasks. An even larger share (95%) of organizations that have already implemented these technologies report that they have, in actuality, led to increased employee retention.

## 95% of organizations that have already implemented AI and automation report it has increased employee retention

Have the AI and automation technologies your organization has implemented increased employee retention?



## Top benefits of AI and automation include **improved safety, higher employee satisfaction**

In what ways has AI and automation technology benefited your organization?



## KEY TAKEAWAY

# Leaders who prioritize workforce technology will be ahead of the pack

Employee engagement and retention are more critical than ever before—but the playbook of the past won't cut it anymore. It's clear what the new industrial workforce wants: technology that enables them to do their work more efficiently and safely.

In 2022, technology that enables operations employees to perform work remotely is already commonplace, and emerging technologies like AI and automation will be just as widespread within the next few years. Operational leaders should embrace these new technologies and implement them thoughtfully to improve employees' day-to-day experience.



# 03

## Environmental sustainability is critical to business success

In response to skyrocketing fuel prices, customer and investor pressures, and the increasing prevalence of EVs, leaders are turning words into action when it comes to environmental sustainability. Organizations are using technology to set and achieve quantitative performance targets—and investments in sustainability are paying off.

### KEY STATS

85%

85% of respondents said increasing the sustainability of their operations is a high priority or critical priority in 2022.

49%

Nearly half (49%) of respondents have accelerated their transition to EVs in response to rising fuel costs.

99%

99% of respondents have already implemented or plan to implement a sustainability program.

## Improving sustainability is a top priority, and the majority will increase their investment in sustainability in 2022

Transportation is the fastest-growing source of emissions worldwide, accounting for 17% of global greenhouse gas emissions and 20% of global CO2 emissions, according to Statista. Commercial freight and passenger vehicles account for the majority of these emissions, which is why sustainability has been a topic of discussion among business leaders and regulators for many years.

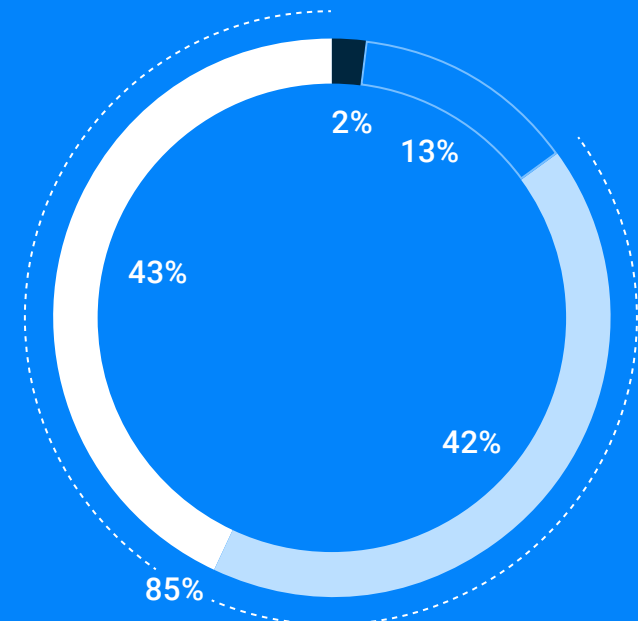
But now, the tides are shifting. Sustainability is no longer just a topic of discussion; it has crystallized into an issue with significant financial implications that demands action. Increased regulatory activity, shifting customer and investor expectations, and the growing availability of commercial EVs are driving an increased focus on, and investment in, sustainability from physical operations organizations.

85% of respondents said increasing the sustainability of their operations is a high priority or critical priority in 2022. Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were even more likely (+14%) to cite sustainability as a high or critical priority this year.**

85% said **increasing the sustainability** of their operations is a **high or critical priority**

In 2022, how important is it to increase the sustainability of your operations?

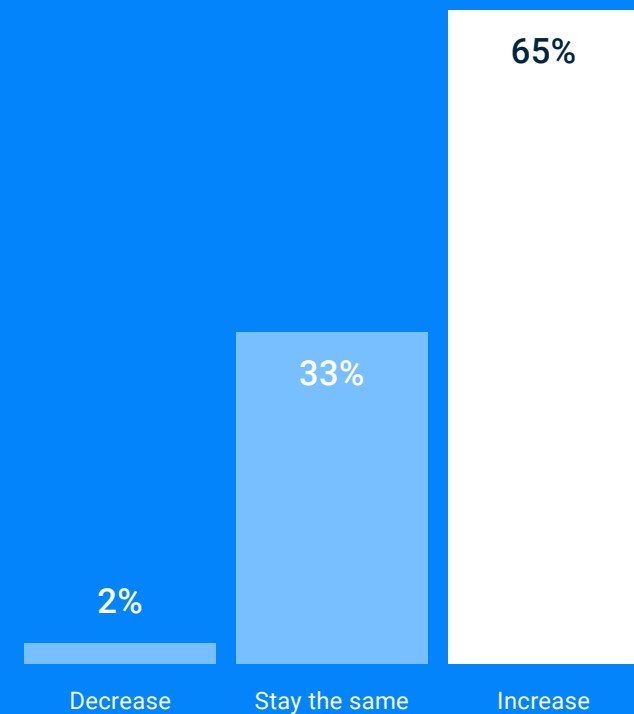
Priority level ● Critical ● High ○ Medium ● Low



The majority (65%) of respondents expect their organization's investment in sustainability to increase in 2022, while only 2% expect it to decrease. Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were more likely (+50%) to report increasing their investment in sustainability this year.**

**65% will increase their investment in sustainability in 2022**

Do you expect your organization's investment in sustainability to increase, decrease, or stay the same in 2022?



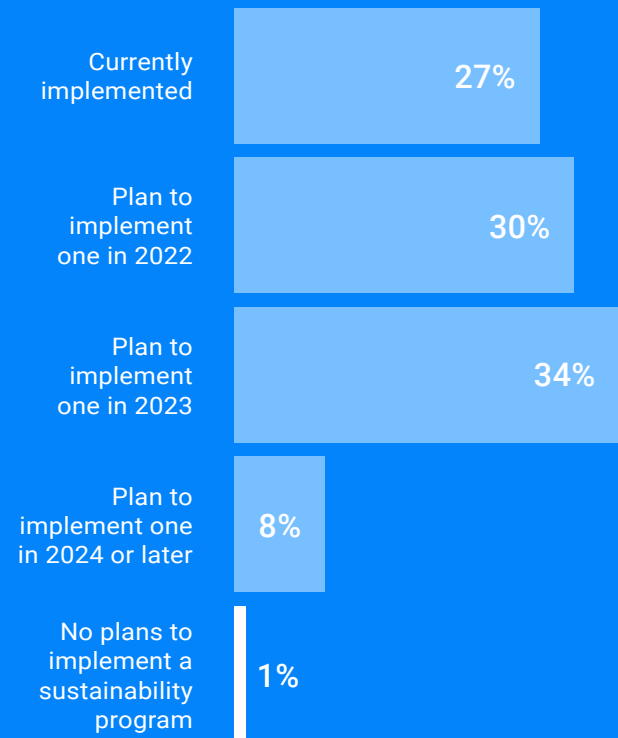


## Environmental sustainability is integral to long-term viability

In this new reality, physical operations organizations are moving away from vague sustainability missions and moving towards creating more formal sustainability programs. 99% of respondents have already implemented or plan to implement a sustainability program. Compared to respondents in the beginning stages of digitization, **Connected Operations Leaders were more likely (+38%) to already have a sustainability program in place.**

**Only 1% have no plans to implement a sustainability program**

What are your organization's plans for implementing a formal sustainability program?



The top five drivers for implementing a formal sustainability program are: aligning with the organization's goals, mission, or values (41%), attracting, motivating, and retaining employees (41%), meeting customer expectations (41%), making a tangible impact on decarbonization and curbing emissions (41%), and increasing competitiveness (40%). This reflects the broader shift in societal expectations on corporate responsibility; organizations see environmental sustainability as integral to long-term viability.

At the same time that sustainability has become more important, it has also become more realistic and achievable. Commercial electric vehicles (EVs), for example, are becoming increasingly available, and the infrastructure to support them is catching up with demand. While the adoption of commercial EVs was already on the rise, our findings reveal that nearly half (49%) of physical operations organizations have accelerated their transition to EVs in response to rising fuel costs.

**49% have accelerated their transition to EVs in response to rising fuel costs**

## Top reasons for investing in sustainability include **attracting employees, meeting customer expectations**

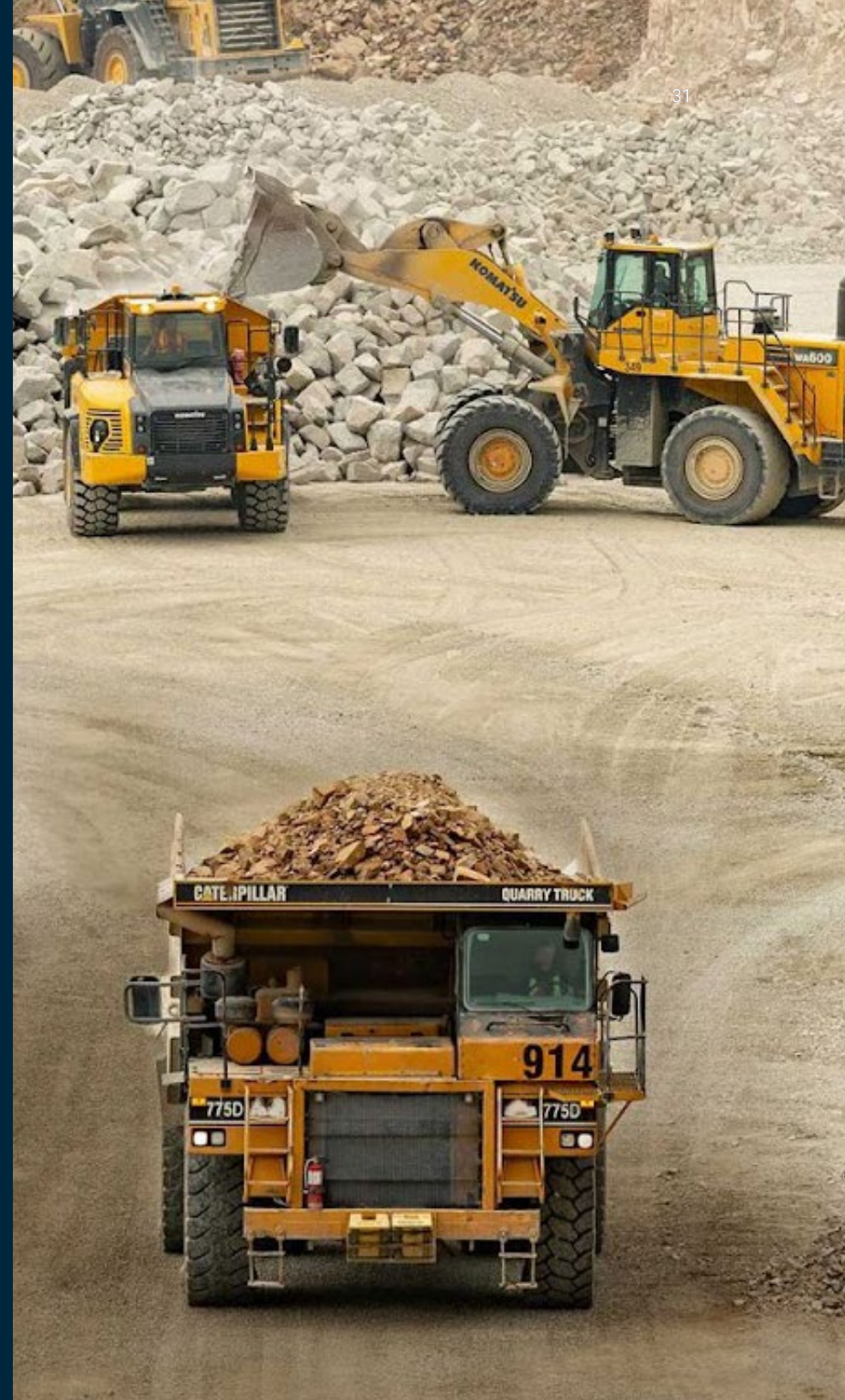
What are your organization's primary drivers for implementing a formal sustainability program? Select all that apply.

- 41% Align with our goals, mission, or values
- 41% Attract, motivate, and retain employees
- 41% Meet customer expectations
- 41% Make a tangible impact on decarbonization and curbing emissions
- 40% Increase our competitiveness
- 39% Conform to regulatory requirements
- 38% Meet investor expectations
- 36% Respond to competitive pressures

“To achieve our goal of net-zero emissions by 2050, we transformed how we monitor fuel usage and idling across our fleet. Now, we are targeting savings of approximately \$1 million per year and a reduction in our CO2 emissions from our transport vehicles.”

**KARLI ANDERSON**

*EVP, Chief Environmental, Safety & Governance Officer  
and Head of Investor Relations at Summit Materials*



## Technology is enabling organizations to set measurable sustainability goals

Today, technology is playing a key role in increasing the sustainability of physical operations. 88% said investing in technology that supports more sustainable operations is a high priority or critical priority for their organization this year. For example, real-time data on fuel usage and idling is being used to reduce carbon emissions, and vehicle utilization data is helping organizations plan their electrification strategy.

As organizations invest more in sustainability, they are also looking for ways to develop more concrete KPIs and quantitative performance targets; 89% of respondents agreed that this is a high or critical priority for their organization this year. Interestingly, organizations that are more digitized are more likely to have concrete goals. **83% of Connected Operations Leaders somewhat or strongly agreed that their organization has measurable sustainability KPIs, compared to 61% of respondents in the beginning stages of digitization.**

88% said investing in technology to support more sustainable operations is a high or critical priority

What level of priority do the following have for your sustainability program over the next five years?

Priority level ● Critical ● High ○ Medium ● Low

Investing in technology to support more sustainable operations



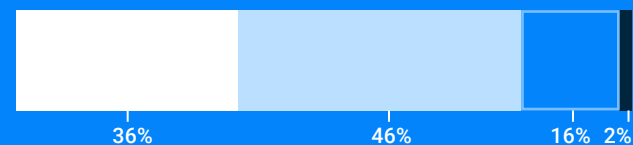
Developing KPIs and quantitative performance targets for sustainability initiatives



Marketing our sustainability efforts to our customers



Hiring leadership to drive sustainability initiatives forward



## Sustainability investments bring greater access to business opportunities

In 2022, sustainability is a prerequisite for business success—and organizations that are investing in sustainability are seeing increased access to business opportunities as a result. For organizations that already have a sustainability program in place, the top-reported benefits are increased access to business opportunities (57%) and higher employee satisfaction (57%). A smaller but still significant percentage (42%) of respondents report revenue gains as a result of their sustainability program, illustrating how investments in sustainability are paying off.

Majority (57%) said investments in sustainability have increased access to **business opportunities & boosted employee satisfaction**

How have investments in sustainability benefited your organization?





## KEY TAKEAWAY

To thrive, businesses must become more sustainable. Data is key to moving the needle.

While only 27% of respondents report currently having a sustainability program in place, it's clear where the industry is headed. Almost 1 in 3 plan to implement a sustainability program by the end of 2022 and nearly all (91%) plan to implement one by the end of 2023. It's not just societal expectations driving this change; it's business sense. Organizations that already have sustainability programs in place report greater access to business opportunities and happier employees.

Today, the question leaders are grappling with isn't whether or when to invest in sustainability, but how they can most effectively move the needle within their organization. That's where technology comes in; connected data exposes inefficiencies in physical operations, informs smarter goals, and makes it possible to achieve those goals through targeted action at scale.



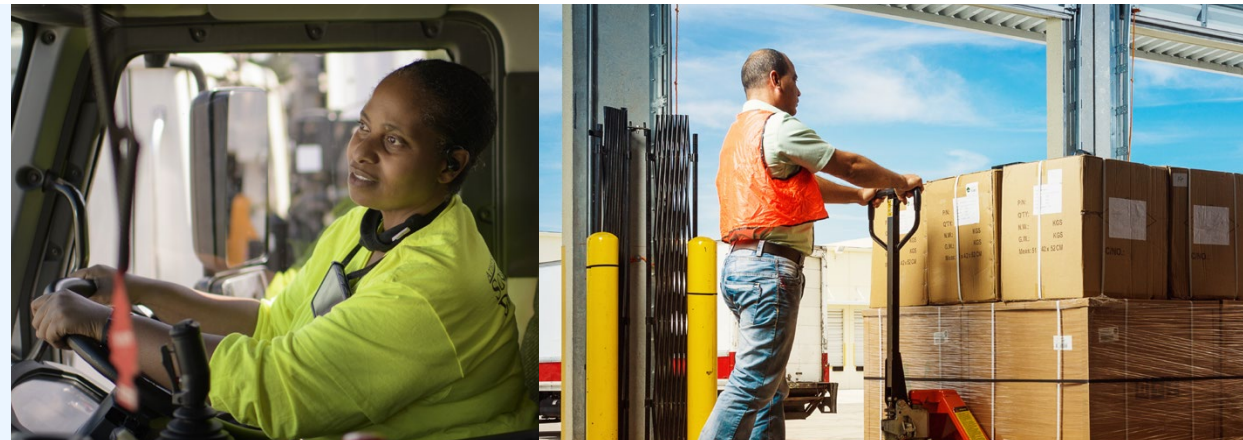
# Conclusion

## The rise of connected operations

For organizations to remain competitive and resilient, the time for change is now. Technology is unlocking new levels of operational efficiency, safety, sustainability, and resiliency. Those at the leading edge of this transformation are realizing the full potential of connecting physical operations to the cloud.

We need look no further than the Connected Operations Leaders highlighted in this report. These leaders are walking proof of the transformative power that comes from connecting operational data: greater profitability, higher employee satisfaction and retention, increased access to business opportunities, and a more sustainable future outlook. These innovators are showing us what's possible.

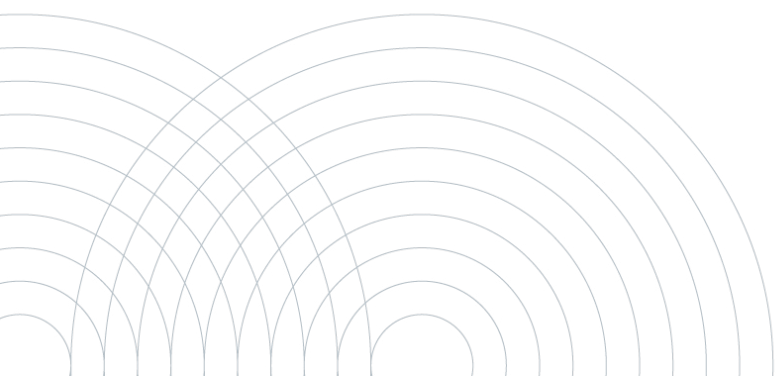
The digital transformation of physical operations across the world will save lives, reduce carbon emissions, and keep the global flow of goods, services, and people moving—even in the face of immense challenges. This report clearly shows the path for the future; those already on this path are better prepared to succeed.



# Methodology

The 2022 State of Connected Operations survey was conducted by an independent research firm, Lawless Research, between April 19, 2022 and May 4, 2022. 1,525 operations leaders were surveyed across eight countries: Belgium, France, Germany, Luxembourg, Mexico, Netherlands, United Kingdom, and the United States. This survey was 10 minutes long and conducted online, in either the English language or translated into a local language across markets. Global results have been aggregated across all responses to provide an average.

*The information provided in this report is for general informational purposes only. Samsara does not guarantee you will achieve any specific results if you follow any advice in the report. It may be advisable for you to consult with a professional such as a lawyer, accountant, architect, business advisor, or professional engineer to get specific advice that applies to your specific situation.*



## Demographics

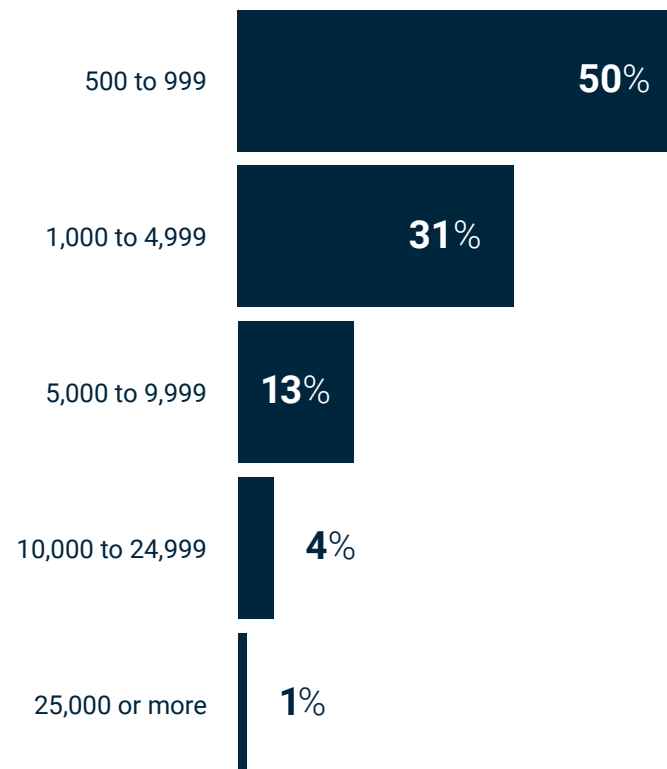
### Qualification criteria

- Full-time employees in organizations with 500 or more employees and 150 or more fleet vehicles (powered assets and/or unpowered assets).
- Directors and above who (1) have responsibility for compliance, field service management, IT, logistics, maintenance, operations, safety, security and/or service operations and (2) are decision-makers for choosing technology for physical/fleet operations.

Country	Percent	Number
Belgium	3%	46
France	13%	200
Germany	16%	250
Luxembourg	1%	10
Mexico	11%	175
Netherlands	3%	44
United Kingdom	20%	300
United States	33%	500
<b>Total</b>	<b>100%</b>	<b>1,525</b>

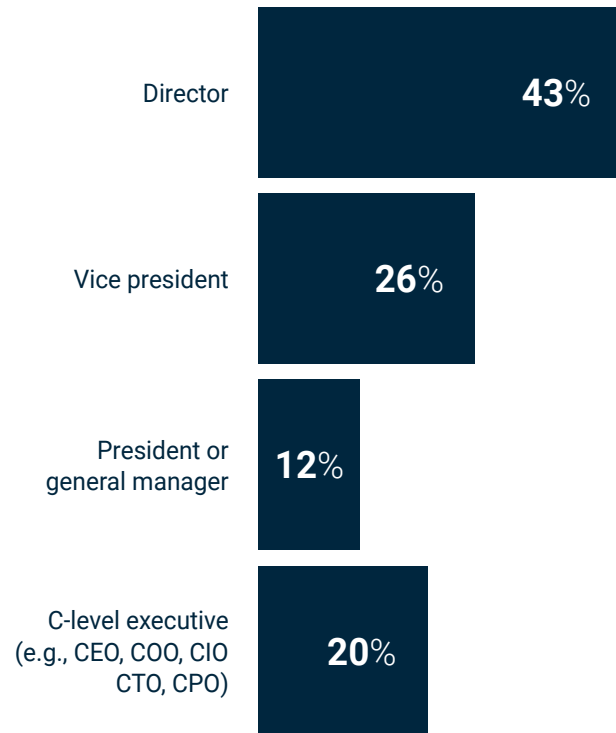
### COMPANY SIZE

Approximately, how many full-time employees does your organization have in all offices and locations?



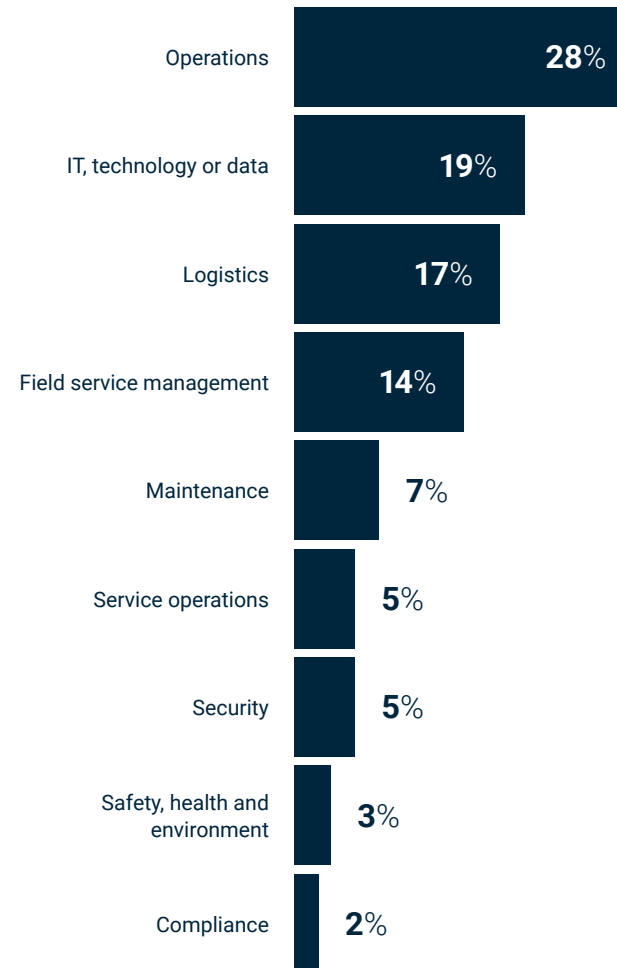
Totals may not add to up 100% due to rounding.

## JOB LEVEL



## PRIMARY RESPONSIBILITY

Which of the following is your primary responsibility regarding physical operations?

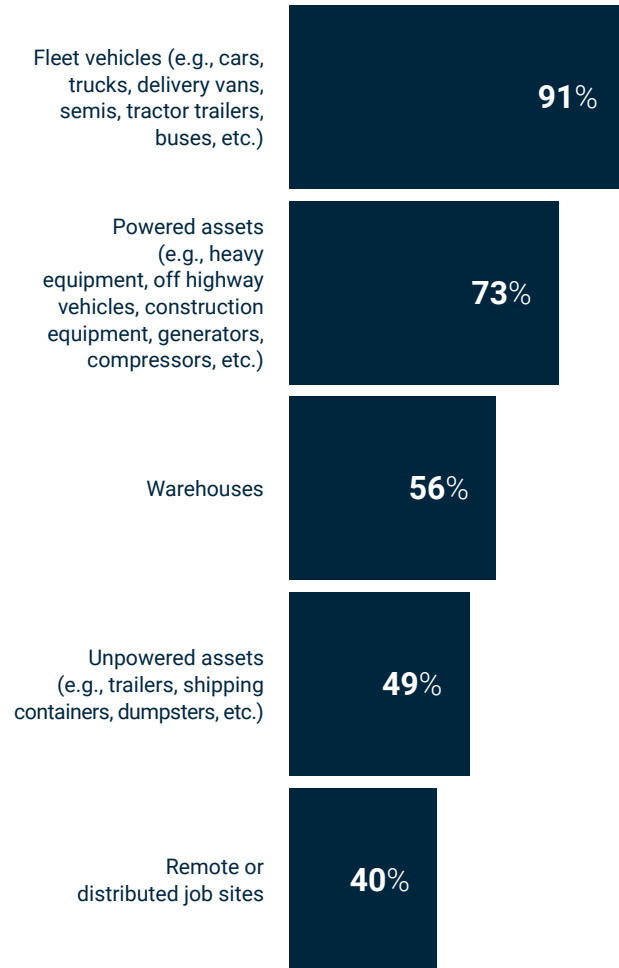


Totals may not add to up 100% due to rounding.



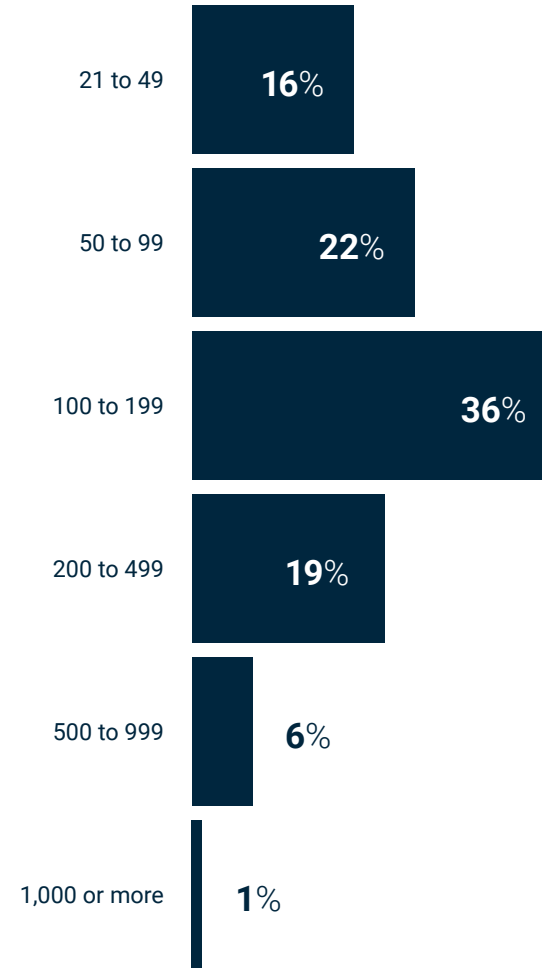
### TYPES OF OPERATIONAL ASSETS MANAGED

Which of the following does your organization operate and manage?



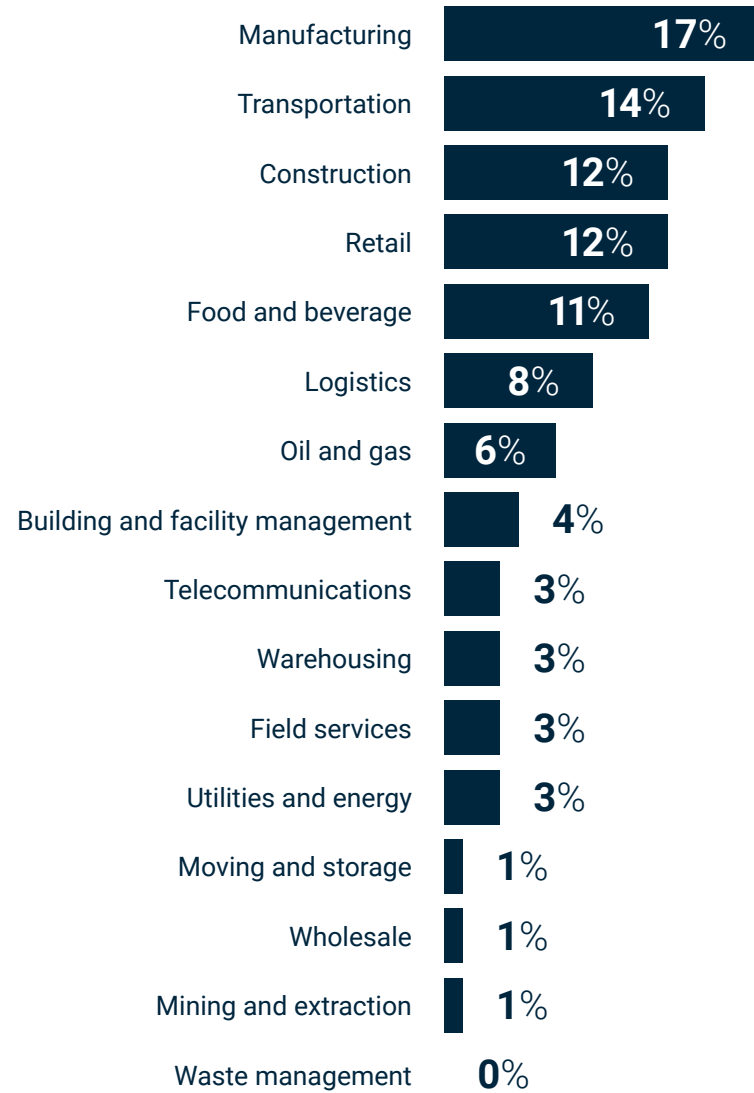
### NUMBER OF VEHICLES

Approximately, how many vehicles does your organization own (excluding leased or rented vehicles)?



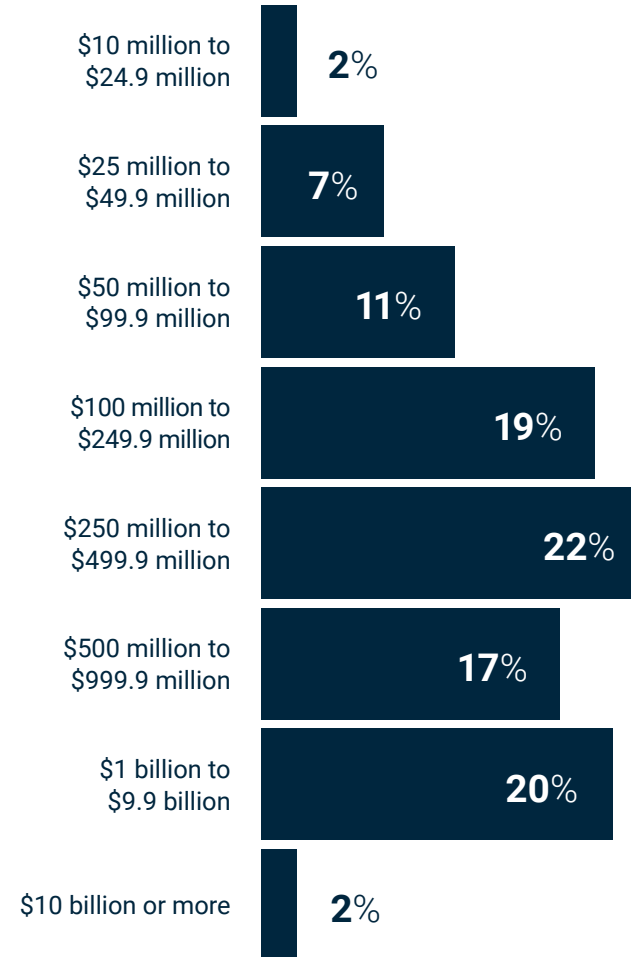
Totals may not add to up 100% due to rounding.

### INDUSTRY



### ANNUAL REVENUE

Approximately, what was your organization's revenue in 2021? (in USD)



Totals may not add up to 100% due to rounding.



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